

REMARKS

I. Status of the Application

By the present amendment, claims 21, 24 and 26 have been amended to correct minor typographical errors and claims 3 and 6 have been amended for reasons of grammar and clarity. The amendments to claims 3, 6, 21, 24 and 26 are not made for patentability reasons and do not narrow the scope of the claims. Additionally, claims 1, 6, 14, 17, 19-23 and 29 have been amended to more fully define the features of the present invention.

Claims 1-33 are all the claims pending in the Application, with claims 1, 6 and 12-29 being in independent form. Claims 1-33 have been rejected.

The present amendment addresses each point of objection and rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

II. Claim Objections

The Examiner has objected to claims 24 and 26 because of minor typographical errors. Claims 24 and 26 have been amended as set forth above to correct the informalities noted by the Examiner. Thus, Applicant respectfully requests withdrawal of this objection.

III. Claim Rejections - 35 USC § 112

A. Dependent Claims 3 and 8

The Examiner has rejected claims 3 and 8 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner alleges that the specification of the present application does not describe how an access point can get access to a

MAC address database of the server if the server is down, and how the steps of claim 1 involving authentication server actions will operate if the authentication server has failed.

Claim 1 has been amended, as set forth above, to recite that the operation of checking said authentication request at said authentication server based on a MAC (media access control) address of said STA, and the operation of notifying an authentication completion from said authentication server to said AP, after said authentication server received a response of a completion of said encryption authentication from said AP, are each performed if no problem occurs at said authentication server.

Claim 6 has also been amended, as set forth above, to recite that if no problem occurs at said authentication server, said authentication checks said authentication request from one of said STAs based on a MAC address of one of said plural STAs by receiving said converted authentication request, and notifies an authentication completion to said AP, after said authentication server received a response of a completion of encryption authentication from said AP.

Therefore, Applicant submits that, contrary to the grounds of rejection, neither dependent claim 3 nor dependent claim 8 (which depend from claims 1 and 6, respectively) recite that an access point obtains access to the MAC address database of the authentication server if the server is down. As a result, Applicant respectfully submits that the features recited in claims 3 and 8 are adequately enabled by the present specification *at least* by page 10, lines 8-12 and lines 21-27.

Specifically, according to an exemplary embodiment described in the present specification, a usable MAC address table is stored in the AP 2 which can be automatically renewed. Accordingly, as shown in Fig. 5, the AP 2 may execute an authentication request to the authentication server 3 by using the MAC address as the ID (S8). However, when a problem occurs at the authentication server 3, the AP 2 can execute the authentication, by itself, using the MAC address because the AP 2 stores a usable MAC address table. Consequently, even when some troubles occur at the authentication server 3, the authentication procedure can be continued.

Hence, Applicant submits that one reasonably skilled in the art could make or use the various inventions recited in claims 3 and 8 from the disclosures on page 10, lines 8-12 and lines 21-27 of the present specification, coupled with information known in the art, without undue experimentation, and that the enablement requirement of 35 U.S.C. § 112 has therefore been satisfied. Accordingly, Applicant respectfully requests that the Examiner withdraw this rejection.

B. Independent Claim 23

The Examiner has rejected claim 23 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, the Examiner alleges that the claim limitation “one wireless LAN system where roaming is not needed” is not understood as written. Claim 23 has been amended as set forth above to address the informalities noted by the Examiner. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

IV. Claim Rejections under 35 USC § 103 - Ichikawa

The Examiner has rejected claims 1-2, 6-7, 9, 12-17, 20-23, 25 and 27-33 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,307,837 to Ichikawa (hereinafter "Ichikawa"). Applicant respectfully traverses this rejection for *at least* the independent reasons stated below.

A. Independent Claim 1

Independent claim 1 recites (among other things):

...if no problem occurs at said authentication server, checking said authentication request at said authentication server based on a MAC (media access control) address of said STA...

The Examiner acknowledges that Ichikawa does not teach or suggest the above feature. Nevertheless, the grounds of rejection set forth the conclusory allegation that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Ichikawa by moving the operation of checking an authentication request based on a MAC address, from the base station to the terminal authentication server. Further, the grounds of rejection allege that one of ordinary skill would have been motivated to make such a modification to reduce the system cost by combining MAC comparison hardware from several base stations into one authentication server. However, the grounds of rejection do not offer a shred of evidentiary support for these bald allegations and, therefore, the grounds of rejection have not established even a *prima facie* case of obviousness, as required by the MPEP.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. (MPEP § 2142). To establish a *prima facie* case of obviousness based on the cited Ichikawa

reference alone, the Examiner must show that Ichikawa teaches or suggests all of the claim limitations in the rejected claims. (See MPEP § 2143). Additionally, the Examiner must establish that there is some suggestion or motivation, in either the Ichikawa reference itself, or in the knowledge generally available to one of ordinary skill in the art, to modify the teachings of Ichikawa as proposed by the Examiner, to arrive at the present invention. (See MPEP § 2143).

In the present case the Examiner has merely cited Ichikawa, baldly alleging that the claim limitation of “checking said authentication request at said authentication server based on a MAC (media access control) address of said STA,” which Ichikawa does not expressly disclose, would have been obvious to one of ordinary skill in the art. (See Office Action dated February 24, 2005, page 5). However, Ichikawa provides no teaching or suggestion whatsoever regarding the feature of checking an authentication request at an authentication server based on a MAC address. In fact, Ichikawa teaches quite the opposite—that the terminal address/VLAN-ID comparison section 15, located in the wireless base station 1-6, searches the terminal information table stored therein to confirm the identity of the VLAN-ID and the source address. (col. 9, ln. 66 – col. 10, ln. 17).

Thus, Ichikawa plainly teaches away from the feature of checking an authentication request at an authentication server based on a MAC address, in that, Ichikawa teaches that the packets received from a terminal 1-7 by the wireless base station 1-6 are always authenticated by the wireless base station 1-6 itself. Therefore, much like the conventional systems discussed in the present specification, Ichikawa teaches that the hardware and software resources of the wireless base station 1-6 are always required to execute the authentication of each wireless

packet terminal 1-7. Further, as discussed in the present specification, it is difficult for the wireless base stations 1-6 to provide MAC address tables for large numbers of terminals. (*See* Specification page 3, lines 15-23). As a result, Ichikawa does not teach, and is incapable of suggesting, the feature of checking an authentication request at an authentication server based on a MAC address, as recited in claim 1.

Ignoring the deficient teachings of Ichikawa, the Examiner merely makes a broad statement of obviousness, with regard to the limitation of checking an authentication request at an authentication server based on a MAC address of an STA, without stating that this limitation is “well known” or without taking “Official Notice.” By failing to cite or show any reference disclosing this limitation, the Examiner has failed to show that these facts, asserted to be obvious by the Examiner, are capable of instant and unquestionable demonstration. (*See In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970)).

Further, the Examiner seems to assert that it would have been obvious to modify Ichikawa to come up with the limitations of the claimed invention. (*See* Office Action, page 5). However, the mere fact that a reference can be modified does not make the resultant modification obvious unless the prior art also suggests the desirability of the modifications. (*See In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)). No aspect of Ichikawa teaches or suggests the desirability of checking an authentication request at an authentication server based on a MAC address of an STA. Moreover, no aspect of Ichikawa teaches or suggests that moving the operation of checking an authentication request at an authentication server, based on a MAC address of an STA, from the base station 1-6 to the terminal authentication server 1-8 would

reduce the system cost by combining MAC comparison hardware from several base stations into one authentication server, as suggested by the grounds of rejection.

In fact, Ichikawa provides no teaching or suggestion whatsoever that such a modification is even feasible, much less desirable. To the contrary, Ichikawa teaches that it is desirable for the base station 1-6 to perform the authentication process at the beginning of the communication process, to prevent fraudulent access. (See col. 8, ln. 64 – col. 9, ln. 4; col. 9, lns. 44-64). Indeed, when Ichikawa is considered as a whole, the entirety of the reference¹ makes clear that it is desirable to provide a base station that allows only registered terminals to access certain data networks, and does not suggest that it is desirable to provide an authentication server which checks an authentication request based on a MAC address.

Moreover, the characterization of certain claim limitations or parameters as obvious does not make the claimed invention, considered as a whole, obvious. It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. (*In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988)). This burden can only be satisfied by an objective teaching in the prior art or by cogent reasoning that the knowledge is available to one of ordinary skill in the art. (See *In re Lulu*, (747 F.2d 703, 223 U.S.P.Q. 1257 (Fed. Cir. 1984))). Here, the Examiner has not provided any factual basis to support the bald assertion that it would

¹ For example, the Title of Ichikawa is “Method and Base Station for Packet Transfer” (emphasis added). Further, the very first line of the specification makes it clear that “[t]he present invention relates in general to a packet transfer method and a base station for using it...” (emphasis added). Similarly, the Summary of the Invention states “[i]t is a first object of the present invention to solve a problem of fraudulent access by providing... base stations that allow only those terminals which are registered beforehand to access certain data networks.” (emphasis added).

have been obvious to one of ordinary skill in the art to modify the teachings of Ichikawa by moving the operation of checking an authentication request based on a MAC address from the base station to the terminal authentication server. Therefore, a legal conclusion of obviousness cannot be maintained for *at least* these reasons.

Furthermore, an Examiner may not rely on official notice, or judicial notice, or a mere statement of obviousness, at the exact point where patentable novelty is argued, but must come forward with pertinent prior art. (*See Ex parte Cady*, 148 U.S.P.Q. 162 (Bd. of App. 1965)).

Here one of the points of novelty is checking an authentication request at an authentication server based on a MAC address. (*See claim 1*). As discussed in the present specification, in conventional systems, the resources of the base stations or access points are always required to authenticate each terminal. Moreover, in conventional authentication systems, it is difficult for base stations or access points to provide MAC address tables for large numbers of terminals.

(*See Specification*, page 3, lines 15-23). To overcome the shortcomings of conventional authentication systems, claim 1 recites the novel feature of checking an authentication request at an authentication server based on a MAC address, rather than checking an authentication request at an access point. However, the Examiner has not cited, nor has the Applicant identified, any prior art which suggests or teaches this, or any other novel aspects of the present invention found in claim 1.

Independent claim 1 further recites (among other things):

...if no problem occurs at said authentication server, notifying an authentication completion from said authentication server to said AP, after said authentication server received a response of a completion of said encryption authentication from said AP.

The grounds of rejection allege that the step of sending an authentication reception signal 2-6 allowing communication, as shown in Figure 3 of Ichikawa, corresponds to the above feature. Applicant respectfully disagrees.

Ichikawa fails to teach or suggest notifying an authentication completion from said authentication server to said AP, as recited in claim 1. Ichikawa plainly teaches that the terminal authentication section 10, located within the wireless base station 1-6 (which the grounds of rejection allege to correspond to an “access point” as recited in claim 1), transmits the authentication reception signal 2-6 to the wireless packet terminal 1-7. Therefore, the authentication reception signal 2-6, which is transmitted from the base station 1-6 to the terminal 1-7, cannot possibly correspond to notifying an authentication completion from said authentication server to an access point, as recited in claim 1. In fact, as taught in Figure 3 of Ichikawa, the only signal that is ever transmitted from the terminal authentication server 1-8 to the wireless base station 1-6 is the terminal information notice 2-3, which clearly does not notify an authentication completion, as required by claim 1.

Therefore, for *at least* the above reasons, Applicant submits that the Examiner has not establish a *prima facie* case for obviousness with respect to claim 1. Further, Applicant submits that the dependent claims 2 and 30-32 are allowable *at least* by virtue of their dependency on

claim 1. Accordingly, Applicant respectfully requests that the Examiner withdraw these rejections.

B. Independent Claim 6

Independent claim 6 recites (among other things):

...said authentication server which, if no problem occurs at said authentication server, checks said authentication request from one of said STAs based on a MAC address of one of said plural STAs...

Independent claim 6 further recites:

...said authentication server which... notifies an authentication completion to said AP, after said authentication server received a response of a completion of encryption authentication from said AP...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 6. As such, it is respectfully submitted that claim 6 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Further, Applicant submits that the dependent claims 7, 9 and 33 are allowable *at least* by virtue of their dependency on claim 6. Thus, the allowance of these claims is respectfully solicited of the Examiner.

C. Independent Claim 12

Independent claim 12 requires (among other things):

...wherein said communication part requests
from said authentication server an authentication
based on said second information certificate...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 12. As such, it is respectfully submitted that claim 12 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

D. Independent Claim 13

Independent claim 13 requires (among other things):

...wherein said communication part requests
from an authentication server an authentication
based on said second information certificate...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 13. As such, it is respectfully submitted that claim 13 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

E. Independent Claim 14

Independent claim 14 has been amended to require (among other things):

...wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully submitted that claim 14 is patentably distinguishable over Ichikawa *at least* for these reasons. Thus, the allowance of this claim is respectfully solicited of the Examiner.

F. Independent Claim 15

Independent claim 15 recites (among other things):

...an authentication server, which issues permission for establishing a connection.

The grounds of rejection do not point to any specific portion of Ichikawa that teaches or suggests the above feature. Indeed, Ichikawa provides no teaching or suggestion whatsoever regarding an authentication server, which issues permission for establishing a connection, as recited in claim 15.

To the contrary, as taught in Ichikawa, the terminal authentication server 1-8 merely transmits a terminal information notice 2-3 to the wireless base station 1-6, in response to a terminal information request 2-2. (col. 7, lns. 45-55; Figure 3). Ichikawa also teaches that, upon

receiving the terminal information notice 2-3, the terminal authentication section 10 stores the received terminal information in the terminal information memory section 11. (col. 7, lns. 45-58). Further, Ichikawa teaches that such terminal information transmitted by the terminal authentication server 1-8 includes terminal addresses, VLAN-Ids and encryption keys. (col. 8, lns. 33-54).

Thus, the terminal authentication server 1-8 taught in Ichikawa merely transmits terminal information such as terminal addresses, VLAN-Ids and encryption keys to the wireless base station 1-6. However, no aspect of Ichikawa teaches or suggests that the terminal authentication server 1-8 taught therein issues permission for establishing a connection, as recited in claim 15. Therefore, Applicant submits that claim 15 would not have been obvious from Ichikawa for *at least* these reasons. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

G. Independent Claim 16

Independent claim 16 recites (among other things):

An access point apparatus comprising:
a communication part...
...wherein when an authentication request is
issued from said terminal:
...said communication part sends the MAC
address of said terminal to said
authentication server and receives a result
of a MAC address authentication performed by
said authentication server...

The grounds of rejection do not point to any specific portion of Ichikawa that teaches or suggests the above feature. In fact, Ichikawa provides no teaching or suggestion whatsoever regarding an access point apparatus comprising a communication part which sends the MAC

address of a terminal to an authentication server and receives a result of a MAC address authentication performed by said authentication server, as recited in claim 16.

In stark contrast, Ichikawa teaches that the only communication sent from a wireless base station 1-6 to the terminal authentication server 1-8 comprises a terminal information request 2-2. (*See* col. 7, lns. 49-53). However, Ichikawa fails to teach or suggest that the terminal information request 2-2 comprises a MAC address of a terminal. Further, for reasons analogous to those presented above with respect to independent claim 1, Ichikawa also fails to teach or suggest that the terminal authentication server 1-8 performs a MAC address authentication, as required by claim 16.

Consequently, Applicant submits that claim 16 is would not have been obvious from Ichikawa for *at least* these reasons and respectfully requests that the Examiner withdraw this rejection.

H. Independent Claim 17

Independent claim 17 has been amended to require (among other things):

...wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully

submitted that claim 17 is patentably distinguishable over Ichikawa *at least* for these reasons.

Thus, the allowance of this claim is respectfully solicited of the Examiner.

I. Independent Claim 20

Independent claim 20 has been amended to require (among other things):

... wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully submitted that claim 20 is patentably distinguishable over Ichikawa *at least* for these reasons. Thus, the allowance of this claim is respectfully solicited of the Examiner.

J. Independent Claim 21

Independent claim 21 has been amended to require (among other things):

... wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully

submitted that claim 21 is patentably distinguishable over Ichikawa *at least* for these reasons.

Thus, the allowance of this claim is respectfully solicited of the Examiner.

K. Independent Claim 22

Independent claim 22 has been amended to require (among other things):

...wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully submitted that claim 22 is patentably distinguishable over Ichikawa *at least* for these reasons. Thus, the allowance of this claim is respectfully solicited of the Examiner.

L. Independent Claim 23

Independent claim 23 has been amended to require (among other things):

...wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully

submitted that claim 23 is patentably distinguishable over Ichikawa *at least* for these reasons.

Thus, the allowance of this claim is respectfully solicited of the Examiner.

M. Independent Claim 25

Independent claim 25 requires (among other things):

...wherein said communication part requests
from said authentication server an authentication
based on said second information certificate...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 25. As such, it is respectfully submitted that claim 25 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

N. Independent Claim 27

Independent claim 27 requires (among other things):

...wherein said communication part requests
from said authentication server an authentication
based on said second information certificate...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 27. As such, it is respectfully submitted that claim 27 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

O. Independent Claim 28

Independent claim 28 requires (among other things):

...inquiring, by said access point apparatus,
to said authentication server whether said
terminal is permitted, according to a MAC address,
to communicate...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 28. As such, it is respectfully submitted that claim 28 is patentably distinguishable over Ichikawa *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

P. Independent Claim 29

Independent claim 29 has been amended to require (among other things):

...when a failure occurs at said
authentication server, executing authentication of
said MAC address by access point apparatus itself.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of when a failure occurs at said authentication server, executing authentication of said MAC address by access point apparatus itself. As such, it is respectfully submitted that claim 29 is patentably distinguishable over Ichikawa *at least* for these reasons. Thus, the allowance of this claim is respectfully solicited of the Examiner.

V. Claim Rejections under 35 USC § 103 – Ichikawa in view of Lewis

The Examiner has rejected claims 4 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Ichikawa in view of U.S. Patent No. 6,453,159 to Lewis (hereinafter “Lewis”). Applicant respectfully traverses these rejections for *at least* the reasons set forth below.

The dependent claims 4 and 10 incorporate all of the novel and non-obvious features of their base claims 1 and 6, respectively. As set forth above, Ichikawa fails to teach or suggest all the features of claims 1 and 6. Further, Lewis does not cure the deficient teachings of Ichikawa. As a result, Applicant respectfully submits that the dependent claims 4 and 10 are allowable *at least* by virtue of their dependency on claims 1 and 6, respectively. Thus, Applicant requests that the Examiner withdraw these rejections.

VI. Claim Rejections under 35 USC § 103 – Ichikawa in view of Lewis and further in view of Applicant’s Admitted Prior Art

The Examiner has rejected claims 5, 11, 24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Ichikawa in view of Lewis and in further view of Applicant’s admitted prior art (Application, pages 1-3). Applicant respectfully traverses these rejections for *at least* the reasons set forth below.

A. Dependent Claims 5 and 11

The dependent claims 5 and 11 incorporate all of the novel and non-obvious features of their base claims 1 and 6, respectively. As set forth above, Ichikawa fails to teach or suggest all the features of claims 1 and 6. Moreover, neither Lewis nor Applicant’s admitted prior art cure

the deficient teachings of Ichikawa. As a result, Applicant respectfully submits that the dependent claims 5 and 11 are allowable *at least* by virtue of their dependency on claims 1 and 6, respectively. Hence, Applicant respectfully requests that the Examiner withdraw these rejections.

B. Independent Claims 24 and 26

Independent claims 24 and 26 recite (among other things):

...said authentication server which checks said authentication request from one of said STAs based on a MAC address of one of said plural STAs by receiving said converted authentication request, and notifies an authentication completion to said AP, after said authentication server received a response of a completion of encryption authentication from said AP...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claims 24 and 26. Thus, for *at least* the reasons presented above with respect to claim 1, Ichikawa fails to teach or suggest all the limitations of claims 24 and 26. Further, neither Lewis nor Applicant's admitted prior art cure the deficient teachings of Ichikawa. Therefore, Applicant respectfully submits that claims 24 and 26 are allowable for *at least* these reasons, and the allowance of these claims is respectfully solicited of the Examiner.

VII. Claim Rejections under 35 USC § 103 – Ichikawa in view of Applicant's Admitted Prior Art

The Examiner has rejected claims 9, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Ichikawa and in view of Applicant's Admitted Prior Art (Application, page 1). Applicant respectfully traverses these rejections for *at least* the reasons set forth below.

A. Dependent Claim 9

The dependent claim 9 incorporates all of the novel and non-obvious features of its base claim 6. As set forth above, Ichikawa fails to teach or suggest all the features of claim 6. Further, Applicant's admitted prior art does not cure the deficient teachings of Ichikawa. As a result, Applicant respectfully submits that the dependent claim 6 is allowable *at least* by virtue of its dependency on claim 6. Thus, Applicant requests that the Examiner withdraw this rejection.

B. Independent Claim 18

Independent claim 18 recites (among other things):

...wherein when an authentication request is issued
by said terminal...
...communication is established with an authentication
server, which determines whether to permit, or not to
permit, said terminal to connect with a network
according to said MAC address of said terminal.

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 18. Thus, for *at least* the reasons presented above with respect to claim 1, Ichikawa fails to teach or

suggest all the limitations of claim 18. Further, Applicant's admitted prior art fails to cure the deficient teachings of Ichikawa. Therefore, Applicant respectfully submits that claim 18 is allowable for *at least* these reasons, and respectfully requests that the Examiner withdraw this rejection.

C. Independent Claim 19

Independent claim 19 has been amended to require (among other things):

...wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address.

Applicant submits that Ichikawa fails to teach or suggest the above feature. In fact, the grounds of rejection have not identified any specific portion of Ichikawa that teaches or suggests the feature of wherein, when a failure occurs at said authentication server, said access point apparatus itself executes authentication of said MAC address. As such, it is respectfully submitted that claim 19 is patentably distinguishable over Ichikawa *at least* for these reasons. Thus, the allowance of this claim is respectfully solicited of the Examiner.

VIII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111
U.S. Serial No. 09/680,258

Attorney Docket No.: Q61120

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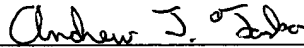
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